

October 3, 2006

MEMORANDUM TO: William H. Ruland, Deputy Director  
Licensing and Inspection Directorate  
Division of Spent Fuel Storage and Transportation, NMSS

FROM: Christopher M. Regan, Senior Project Manager */RA/*  
Licensing Branch  
Licensing and Inspection Directorate  
Division of Spent Fuel Storage and Transportation, NMSS

SUBJECT: SUMMARY OF SEPTEMBER 28, 2006, MEETING WITH NAC  
INTERNATIONAL (TAC NO. L24016)

On September 28, 2006, the Nuclear Regulatory Commission (NRC) staff from the Division of Spent Fuel Storage and Transportation met with representatives of NAC International (NAC) at NRC Headquarters in Rockville, Maryland. The purpose of the meeting was to discuss the submittal of a new application for the Californium Transport System (CTS), submittal of requests for amendment to the Certificates of Compliance (CoC) for the NAC Universal Storage System (UMS) and NAC Multi-Purpose Canister (MPC) spent fuel storage systems, and implementation issues related to 10 CFR Part 72. NAC also included a short discussion of a proposed amendment to the NAC Legal Weight Truck (LWT) transportation package. The desired outcome of the meeting was to provide details of the proposed submittals and to identify potential process and technical issues for the applicant to consider. The meeting was noticed on September 14, 2006. Enclosure 1 is a list of attendees; Enclosure 2 contains the NAC presentation slides.

NAC began the presentations (Enclosure 1) with an overview and history of the CTS package. This included Department of Energy (DOE) review activities associated with the CTS package that have been previously performed. Given that the CTS package had been submitted to DOE for licensing, the staff questioned the need for NRC review and licensing of this package. Specifically, what NRC licensees would be ultimately using the package once approved? An Oak Ridge National Laboratory (ORNL) representative indicated that there were several commercial users for the CTS package but at that time he could not provide specifics. The staff stressed that demonstration of the need for commercial use of the package must be included in the application package in order to justify NRC review.

During the technical presentation of the CTS package, the staff queried NAC on several aspects of the structural analysis. This included NAC's proposal to forego physical testing in lieu of demonstration of the package's integrity by computer analysis. The staff was concerned that the approach and computer modeling software may not be sufficient to demonstrate that regulatory requirements have been met for drop test scenarios. The staff noted that there should be sufficient justification for the drop test orientations proposed. Given the staff's concerns regarding demonstration by analysis, the staff asked if physical testing of just the impact limiter for the CTS package would be possible. The applicant agreed to consider this approach.

The applicant proposed a completion date and issuance of the CoC for the CTS package of February 28, 2008, in order to provide enough lead time for fabrication of the package. The current CoCs for packages capable of transporting Californium will expire in October 2008. The applicant proposes to submit the application on February 27, 2007. The staff expressed concerns regarding the proposed schedule but recognized the apparent need.

NAC proceeded with the presentations and provided short overviews of the proposed amendments for the NAC LWT and NAC UMS. The details of the proposed submittals are provided in the presentation materials (Enclosure 1). For the NAC LWT, NAC plans to submit the application by the end of October 2006 and will be requesting approval of the revised CoC by April of 2007. This need is to support research reactor shipments. The staff noted that this was an overly ambitious schedule and that the staff may have to re-prioritize resources in order to satisfy NAC's request. For the NAC UMS, NAC submitted an application, prior to the meeting on September 22, 2006. NAC is requesting the amendment be effective by October 1, 2007. This need is necessary to support a spent fuel storage loading campaign at the Palo Verde Independent Spent Fuel Storage Installation in January 2008. The staff commented that given the time frame necessary for rulemaking activities, requesting the staff to complete a technical review by the proposed dates may be optimistic.

NAC provided a status of a pending licensing action regarding the NAC MPC. This included a summary of the review schedule and requested effective date of the amendment. The staff indicated that the review was proceeding as scheduled. In addition, there was a discussion of implementation of the changes in the proposed amendment. This discussion included potential actions for a general licensee and the methods to be used for applying new changes in a current amendment to previously loaded storage casks.

No regulatory decisions were made by the NRC during the meeting on the material presented. Given the number of NAC licensing applications to be submitted to the NRC and the NAC applications currently under review, NAC was urged to submit a letter to the NRC with a priority for review of the licensing actions. This will aid the NRC with allocation of staff resources. A member of the public asked the staff if the implementation issue has been considered for discussion with the Nuclear Energy Institute (NEI). The staff stated that the issue is on the agenda for the next NEI-NRC Spent Fuel Storage Task Group meeting.

TAC No. L24016

Enclosures: 1. Attendance List  
2. Presentation Slides

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**Enclosure 1**

**Attendee List**

**Meeting with NAC International  
September 28, 2006**

ATTENDANCE LIST

<u>Name</u>	<u>Affiliation</u>
Bill Ruland	NRC/NMSS/SFPO
Christopher Regan	NRC/NMSS/SFPO
Elaine Keegan	NRC/NMSS/SFPO
Shana Helton	NRC/NMSS/SFPO
Nancy Osgood	NRC/NMSS/SFPO
Larry Campbell	NRC/NMSS/SFPO
Gordon Bjorkman	NRC/NMSS/SFPO
Jose Cuadrado	NRC/NMSS/SFPO
Keith Armstrong	NRC/NMSS/SFPO
Larry L. Campbell	NRC/NMSS/SFPO
Bob Nelson	NRC/NMSS/SFPO
Ray Wharton	NRC/NMSS/SFPO
Jill Caverly	NRC/NMSS/SFPO
Neil Jensen	NRC/OGC
Andrew Pesrin	NRC/OGC
Tom Danner	NAC
Anthony Patko	NAC
Holger Pfeifer	NAC
George Carver	NAC
Mike Yaksh	NAC
Mark Hawk	ORNL
Glenn Micheal	Arizona Public Service Co.
Thecla Fabian	Fuel Cycle Week
Elizabeth McCourt	New York Nuclear Corp.
Carlyn Greene	Washington Nuclear Corp.

## **Enclosure 2**

### **Presentation Slides**